

Remarks

By this Amendment, claim 1 has been amended, claims 10-42 have been cancelled and claims 43-52 have been newly added. Claims 1, 3-9 and 43-52 are pending. Reconsideration of the application in light of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-7 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,724,327 to Pope *et al.* (“Pope”) in view of U.S. Patent No. 6,437,711 to Nieminen *et al.* (“Nieminen”). Applicants respectfully traverse this rejection.

Applicants respectfully submit that the cited portions of Pope and Nieminen, taken together or individually, do not disclose, teach or render obvious a method of encoding information, comprising, *inter alia*, identifying a length of information to be sent in a block code; and encoding the information to be sent in the block code into two or more codewords comprising a first codeword and a last codeword, the encoding comprising: balancing codeword lengths to be approximately equal for at least a portion of the two or more codewords, before the last codeword; and setting code rates of the two or more codewords such that the last codeword has a lower code rate than the first codeword wherein a substantially similar codeword error probability is achieved for each codeword; and further wherein a time for decoding the last codeword is less than a time for decoding the first codeword, as recited in claim 1.

Even though Pope has been cited as a primary reference in rejecting the claims, the Examiner has applied Nieminen as the primary reference and used Pope to fill the gaps in Nieminen. Thus, Applicants have treated Nieminen as the primary reference in the present Amendment.

Nieminen is directed to a method of encoding an input data block with a block encoder. In particular, the cited portions of Nieminen disclose determining the length of the input data block before encoding any of its data with the block encoder; dividing the input data block into a plurality of segments wherein all segments are of substantially equal size and no segment is larger than the upper limit; and processing each segment with the block encoder. *See, Abstract of Nieminen.*

Applicants respectfully submits that Nieminen fails to disclose, teach or suggest at least the features of setting the recited code rates “setting code rates of the two or more codewords such that the last codeword has a lower code rate than the first codeword wherein a substantially similar codeword error probability is achieved for each codeword; and further wherein a time for decoding the last codeword is less than a time for decoding the first codeword,” as recited in claim 1. The Final Action alleges that Nieminen discloses these features in lines 25-30 of column 3. Applicants disagree. Nothing in the cited passage of Nieminen discloses or teaches that the recited code rates are set based upon the recited similar codeword error probability and the recited time for decoding the last codeword is less than a time for decoding the first codeword.

Pope also fails to fill this gap in Nieminen. Thus, the cited references as a whole fail to teach or suggest the claimed invention.

Moreover, Applicants submit that the Final Action has not established the requisite and proper analysis as to how and why one of ordinary skill in the art would combine and/or modify Nieminen and Pope to arrive at the claimed invention.. *See KSR Int'l. Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741 (2007) (a determination, with supporting evidence, must be made as to “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit”). Instead, the Final Action merely offers the conclusory statement above. This is clearly inadequate under the Supreme Court's *KSR* decision since the Final Action cites nothing which supports such a conclusion.

In fact, persons of ordinary skill in this art would recognize that Nieminen and Pope are not properly combinable for at least the fact that neither Nieminen nor Pope disclose, teach or suggest the recited feature of “setting code rates of the two or more codewords such that the last codeword has a lower code rate than the first codeword wherein a substantially similar codeword error probability is achieved for each codeword; and further wherein a time for decoding the last codeword is less than a time for decoding the first codeword,” as recited in claim 1. The Examiner has, at best, used Applicants own disclosure as a roadmap to combine and modify

Nieminen and Pope to arrive at the claimed invention. Applicants submit that the Examiner is simply engaging in hindsight reasoning, which has been long held to be improper.

Furthermore, the Final Action has not provided any technical or objective basis to support the determination that Nieminen's method could be modified as alleged in the Final Action. As such, the Final Action's rationale for modifying Nieminen is merely speculative.

Thus, Applicants respectfully submit that neither Nieminen nor Pope, either individually or in combination, disclose, teach or render obvious all of the features recited in claim 1. Therefore, claim 1 should be allowable at least for this reason. Dependent claims 3-7 depend upon base independent claim 1, and should be allowable by reason of their dependency upon an allowable base claim.

Claims 8 and 9 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Pope in view of Nieminen and in further view of U.S. Patent No. 6,757,337 to Zhuang *et al.* ("Zhuang"). Applicants respectfully traverse this rejection.

Claims 8 and 9 depend from claim 1 and are, therefore, patentable for at least the same reasons provided above with respect to claim 1 and for the additional features recited in those claims. As noted above, the cited portions of Nieminen and Pope fail to disclose or render obvious claim 1.

Further, even assuming *arguendo* that the cited portions of Pope, Nieminen and Zhuang are properly combinable (which Applicant does not concede), the cited portions of Zhuang fail to overcome the shortcomings of Pope and Nieminen and/or to independently disclose or render obvious the features of claim 1. The cited portions of Zhuang merely disclose methods of decoding information within communication systems, such as a method for Multiple-Input-Multiple-Output (MIMO) detection and decoding within the communication systems. *See, Abstract of Zhuang.* Moreover, the cited portions of Zhuang fail to at least disclose or render obvious a method of encoding information, comprising, *inter alia*, "setting code rates of the two or more codewords such that the last codeword has a lower code rate than the first codeword wherein a substantially similar codeword error probability is achieved for each codeword; and further wherein a time for decoding the last codeword is less than a time for decoding the first codeword," as recited in claim 1.

As a result, Applicant requests that the rejection of claim 8 and 9 under 35 U.S.C. §103(a) in view of Pope, Nieminen and Zhuang be withdrawn and the claims be allowed.

Dependent claims 43 and 44 have been newly added. Claims 43 and 44 depend from claim 1 and are, therefore, patentable for at least the same reasons provided above with respect to claim 1 and for the additional features recited in those claims. As noted above, the cited portions of Nieminen and Pope fail to disclose or render obvious claim 1.

Claims 45-52 have also been newly added. Claim 45 is patentable for at least similar reasons proved above with respect to claim 1. Claims 46-52 depend from claim 45 and are, therefore, patentable for at least the same reasons provided above with respect to claim 45 and for the additional features recited in those claims.

In view of the above amendment, applicant believes the pending application is in condition for allowance. Applicants request a 1-month extension of time and submit related fees in the attached Petition. The Director is authorized to charge any additional fees necessary and/or credit any overpayments to Deposit Account No. 03-3975, referencing Docket No. 043395-0378347.

Respectfully submitted,

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